

CLAIMS

What is claimed is:

- 5 1. A wireless communication unit comprising:
a transceiver suitable to support an air interface with a first wireless
communication network and with a second wireless communication network; and
a controller, coupled to and controlling the transceiver, for obtaining a
handover number that terminates on a mobility manager associated with the first
10 communication network, the handover number useable to facilitate a handover of an
ongoing communication from the first wireless communication network to the second
wireless communication network.
2. The wireless communication unit of claim 1, wherein the controller controls
15 the transceiver to obtain the handover number from a network entity within the first
communication network.
3. The wireless communication unit of claim 1, wherein the controller controls
the transceiver to forward information regarding the ongoing communication to the
20 mobility manager to facilitate the handover.
4. The wireless communication unit of claim 1, wherein the controller, when a
pending handover is indicated, controls the transceiver to initiate a handover call

using the second wireless communication network, the handover call addressed to the handover number.

5. The wireless communication unit of claim 4, wherein the controller controls
5 the transceiver to switch the ongoing communication to the second wireless network
and to discontinue the ongoing communication with the first communication network
when the handover call has been connected.

6. The wireless communication unit of claim 1, wherein the first wireless
10 communication network is a wireless local area network and the second wireless
communication network is a wireless wide area network.

7. The wireless communication unit of claim 1 wherein the controller is for
obtaining the handover number during the setup of the ongoing communication.

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8. The wireless communication unit of claim 7 wherein the handover number is
obtained by including it in one of a Session Initiation Protocol (SIP) INVITE message
and a response message to the SIP INVITE message.

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9. A mobility manager for facilitating handover of communication from a first communication network to a second communication network, the mobility manager comprising:

a interface function to interface to the first communication network; and

5 a controller coupled to and controlling the interface function to:

obtain call information corresponding to an ongoing communication between a wireless communication unit and a peer communication unit that uses the first communication network; and

ascertain a handover number for the wireless communication unit, the
10 handover number terminating on the mobility manager for use in facilitating the handover of the ongoing communication to the second communication network.

10. The mobility manager of claim 9 wherein the controller further obtains the call information from one of the wireless communication unit and a network server.

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11. The mobility manager of claim 9 wherein the first communication network is a wireless local area network and the second communication network is a wireless wide area network.

20 12. The mobility manager of claim 9 wherein the controller cooperatively with the interface function is operable to receive a handover call originating from the wireless communication unit using the second communication network that is directed to the handover number.

13. The mobility manager of claim 12 wherein the handover call is received from a network switching function for the first communication network and the controller further operates to facilitate connecting the peer communication unit to the handover call and sending a connect indication for the handover call to the wireless
5 communication unit.

14. The mobility manager of claim 13 wherein the connecting the peer communication unit to the handover call further comprises one of a) transferring the ongoing communication of the peer communication unit to the handover call, b)
10 conferencing the ongoing communication of the peer communication unit, the ongoing communication of the wireless communication unit, and the handover call together, and c) rerouting the ongoing communication with the peer communication unit to coincide with the routing of the handover call at the network switching function.

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15. The mobility manager of claim 13 wherein the controller operates to facilitate the handover call by initiating a message that results in routing the ongoing communication of the peer communication unit to the handover call.

20 16. The mobility manager of claim 15 wherein the message is further initiated on behalf of the wireless communication unit.

17. The mobility manager of claim 15 wherein the message is further directed to the network switching function.

18. The mobility manager of claim 15 wherein the message is directed to a first network switching function and responsive to the message, a corresponding message is directed to a second network switching function that is supporting the ongoing
5 communication with the peer communication unit.
19. The mobility manager of claim 18 wherein a response message initiated by the peer communication unit is received by the controller via the interface function and this response message triggers sending the connect indication to the wireless
10 communication unit.
20. The mobility manager of claim 9 wherein the ascertaining the handover number further comprises one of obtaining the handover number from the wireless communication unit, assigning and providing the handover number to the wireless
15 communication unit, and obtaining the handover number from another network server.
21. The mobility manager of claim 9 wherein the interface with the first communication network is one of a Session Initiation Protocol (SIP) interface and an
20 H.323 interface.
22. The mobility manager of claim 20 wherein the handover number is included in one of a SIP INVITE message and a response message to the SIP INVITE message.

23. A method for facilitating handover of communication from a first communication network to a second communication network, the method comprising:
obtaining call information corresponding to an ongoing communication
5 between a wireless communication unit and a peer communication unit, the ongoing communication using the first communication network; and
ascertaining a handover number for use by the wireless communication unit, the handover number terminating within the first communication network for use in facilitating the handover of the ongoing communication to the second communication
10 network.
24. The method of claim 23 wherein the obtaining the call information further comprises obtaining the call information from one of the wireless communication unit and a network entity within the first communication network.
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25. The method of claim 23 wherein the first communication network is a wireless local area network and the second communication network is a wireless wide area network.
- 20 26. The method of claim 23 further comprising receiving a handover call originating from the wireless communication unit using the second communication network that is directed to the handover number.

27. The method of claim 26 wherein the receiving the handover call results from determining that a handover condition is indicated.

28. The method of claim 27 wherein the determining the handover condition is performed by one of the wireless communication unit and another network entity within the first communication network.

29. The method of claim 26 wherein the handover call is received at a network switching function for the first communication network and a network entity operates to facilitate connecting the peer communication unit to the handover call and to send a connect indication for the handover call to the wireless communication unit.

30. The method of claim 29 wherein the connecting the peer communication unit to the handover call further comprises one of a) transferring the ongoing communication of the peer communication unit to the handover call, b) conferencing the ongoing communication of the peer communication unit, the ongoing communication of the wireless communication unit, and the handover call together, and c) rerouting the ongoing communication with the peer communication unit to coincide with the routing of the handover call at the network switching function.

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31. The method of claim 29 wherein the network entity operates to facilitate the handover call by initiating a message that results in routing the ongoing communication of the peer communication unit to the handover call.

5 32. The method of claim 31 wherein the message is further initiated on behalf of the wireless communication unit.

33. The method of claim 31 wherein the message is further directed to the network switching function.

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34. The method of claim 31 wherein the message is directed to a first network switching function and then to a second network switching function and then to the peer communication unit.

15 35. The method of claim 34 wherein a response message initiated by the peer communication unit is received by the network entity and this response message triggers sending the connect indication to the wireless communication unit.

20 36. The method of claim 23 wherein the ascertaining the handover number further comprises one of obtaining the handover number from the wireless communication unit, assigning and providing the handover number to the wireless communication unit, and obtaining the handover number from another network server.

37. The method of claim 23 wherein the first communication network uses one of a Session Initiation Protocol (SIP) interface and an H.323 interface.
38. The method of claim 37 wherein the ascertaining the handover number is done
5 during the setup of the ongoing communication.
39. The method of claim 36 wherein the handover number is included in one of a SIP INVITE message and a response message to the SIP INVITE message.